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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/777,182	02/13/2004	Craig Andrew Weldon	051481-5128	4468
9629	7590	10/14/2004	EXAMINER	
MORGAN LEWIS & BOCKIUS LLP 1111 PENNSYLVANIA AVENUE NW WASHINGTON, DC 20004			GIMIE, MAHMOUD	
			ART UNIT	PAPER NUMBER

3747

DATE MAILED: 10/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/777,182

Applicant(s)

WELDON, CRAIG ANDREW

Examiner

Mahmoud Gimie

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 13 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese patent Number (JP-10197517).

JP-10197517 shows a vapor fuel generation and management system for an evaporative fuel vapor engine, comprising: a fuel tank/cylinders (1a-1f) that defines a chamber storing an evaporative liquid fuel, the fuel tank having a liquid fuel outlet (1b) and a fuel vapor outlet (1a); a carbon canister (Ca) in communication with the fuel vapor outlet of the fuel tank; a fuel vaporization (30, detail shown in figures 2-4) unit that generates vapor fuel, the fuel vaporization unit including a movable agitator member (33), the fuel vaporization unit (30) having a liquid fuel inlet (figure 1) in communication with the liquid fuel outlet of the fuel tank, a fuel vapor inlet (figure 1) in communication with the carbon canister (Ca), and a vapor fuel outlet in communication with an engine intake manifold; and a purge valves (20, 24) that controls vapor fuel flow to the fuel vapor generator.

JP-10197517 flow rate valves (20, 24) do not control flow into the engine intake manifold, instead they control flow into the vapor generator (30).

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It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of JP-10197517 by relocating the purge valve/vapor flow valve between the intake manifold and the vapor generator, since it has been held that rearranging parts of an invention involves only routine skill in the art. The motivation to do so would have been to control fuel vapor flow into the engine intake manifold.

With regard to claim 2, the fuel vaporization unit includes: a housing (310) having a wall defining a chamber, the housing chamber having a lower portion and an upper portion, the lower portion formed for a liquid fuel bath, the upper portion formed for a vapor fuel space, see figure 2.

With regard to claim 3, wherein the liquid fuel inlet of the fuel vaporization unit includes a first port in the housing wall; the fuel vapor inlet of the fuel vaporization unit includes a second port in the housing wall proximate the upper portion; and the vapor fuel outlet of the fuel vaporization unit includes a third port in the housing wall proximate the upper portion.

With regard to claims 4-24, see above and figures 1-4.

### **Conclusion**

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The cited references show evaporative fuel control systems.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mahmoud Gimie whose telephone number is 703-305-1037. The examiner can normally be reached on Tuesday-Friday between 7 a.m. -3:30 p.m.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Henry Yuen can be reached on 703-308-1946. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MG

 10/13/04  
MAHMOOD GHMIE  
PRIMARY PATENT EXAMINER  
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